# Dibyadip Chatterjee

✓ dibyadip@comp.nus.edu.sg

#### RESEARCH INTERESTS

- Large vision-language models for semantic understanding of videos.
- Test-Time Adaptation of vision-language models.
- Video generation models as world simulators.

## **EDUCATION**

## National University of Singapore

Singapore

Ph.D. in Computer Science

August 2023 - Present

GPA: 4.67/5.00 Advisor: Angela Yao

President's Graduate Fellowship

Jadavpur University

Kolkata, India

B.E. in Electronics and Telecommunication Engineering (ECE)

July 2016 - June 2020

GPA: 9.2/10.0 (First Class with Honours)

Advisor: Ananda S. Chowdhury

Thesis: Open-set Metric Learning for Person Re-identification in the Wild [6]

### **EXPERIENCE**

Meta Reality Labs

Zürich, Switzerland

June 2024 - Dec 2024

Research Scientist Intern Manager: Fadime Sener

Project: Streaming Video Large Language Models for Procedural Understanding [1]

National University of Singapore

Singapore

Research Assistant August 2020 — July 2023

Advisor: Angela Yao

Projects: Assembly101 [4], Opening the Vocabulary of Egocentric Actions [3]

Samsung Research

Bangalore, India

Research Intern

May 2019 – July 2019

Manager: Satya Kumar Vankayala

Project: Deep Learning Architectures for Modeling Communication Systems [7]

# **PUBLICATIONS**

[1] **Dibyadip Chatterjee**, Edoardo Remelli, Yale Song, Buğra Tekin, Abhay Mittal, Bharat Bhatnagar, Necati Camgöz, Shreyas Hampali, Eric Sauser, Shugao Ma, Angela Yao and Fadime Sener. "Streaming Video Large Language Models for Procedural Understanding". (under submission)

- [2] Md Salman Shamil, **Dibyadip Chatterjee**, Fadime Sener, Shugao Ma and Angela Yao. "On the Utility of 3D Hand Poses for Action Recognition". In *ECCV 2024*
- [3] **Dibyadip Chatterjee**, Fadime Sener, Shugao Ma and Angela Yao. "Opening the Vocabulary of Egocentric Actions". In *NeurIPS 2023*
- [4] Fadime Sener, **Dibyadip Chatterjee**, Daniel Shelepov, Kun He, Dipika Singhania, Robert Wang and Angela Yao. "Assembly101: A Large-Scale Multi-View Video Dataset for Understanding Procedural Activities". In *CVPR* 2022
- [5] Fadime Sener, **Dibyadip Chatterjee** and Angela Yao. "Technical report: Temporal aggregate representations". In arXiv preprint 2021

[6] Arindam Sikdar, **Dibyadip Chatterjee**, Arpan Bhowmik and Ananda S Chowdhury. "Open-set metric learning for person re-identification in the wild". In *ICIP 2020* 

[7] **Dibyadip Chatterjee**, Harsh Jaiswal, Adarsh Honakamble and Konchady G. Shenoy. "Deep Learning Architectures for Modeling Communication Systems". In *IEEE ANTS 2019* (Oral)

#### **TEACHING**

## Teaching Assistant:

• Computer Vision and Pattern Recognition (CS4243)

Fall 2021, Winter 2024

School of Computing, National University of Singapore  $\,$ 

Lecturer: Angela Yao

• Feature Engineering for Machine Learning (BT3017)

Winter 2024

School of Computing, National University of Singapore

Lecturer: NG Teck Khim

#### ACADEMIC SERVICES

Member of Student Area Search Committee, School of Computing 2025 Faculty Recruitment for the Department of Computer Science

January 2025 - Present

## Workshops:

• Co-organized HBHA Workshop in conjunction with ECCV 2022

Tel Aviv-Yafo, Israel

Reviewer: CVPR'(23-25), ECCV'(22-24), ICCV'23, AAAI'24, BMVC'21, TPAMI, IJCV

#### HONORS AND AWARDS

EgoVis 2022/2023 Distinguished Paper Winner, CVPR 2024

2024

Awarded to only 10 papers in the field of egocentric vision for the years 2022–23.

President's Graduate Fellowship (PGF), National University of Singapore

2023

A small number of PhD research candidates are selected each semester by the University for the Fellowship.

National Finalists, Automate for Bank Hackathon, State Bank of India

2018

Ranked among the top 20 teams nationwide in the inaugural edition of the SBI Hackathon.